

the reaction products of:

(1) a diisocyanate selected from the group consisting of toluene diisocyanate, 4,4'-diphenylmethane diisocyanate, Isophorone diisocyanate and mixtures thereof;

(2) a polyol; and,

(3) a curing agent comprising:

(a) a first diamine which reacts at a first reaction rate; and,

(b) a second diamine which reacts at a rate faster than the first diamine.

31. The golf ball of claim 30 wherein the polyol is an ether glycol.

32. The golf ball of claim 30 wherein the polyol is polytetramethylene glycol.

33. The golf ball of claim 30 wherein the second diamine is diethyl-2,4-toluenediamine.

34. The golf ball of claim 30 wherein the first diamine is dimethylthio-2,4-toluenediamine.

35. The golf ball of claim 30 wherein the curing agent comprises a blend of dimethylthio-2,4-toluenediamine and diethyl-2,4-toluenediamine.

36. The golf ball of claim 30 wherein the core is comprised of cis polybutadiene rubber.

37. The golf ball of claim 36 wherein the core comprises a center made from cis polybutadiene rubber and thread windings.

38. The golf ball of claim 37 wherein the center has a diameter from about 1.40" to about 1.53".

39. The golf ball of claim 38 wherein the thread windings are made from polyisoprene rubber.

Sub 40
40. A golf ball comprising:

a core comprising a center and thread layer wherein said core has a diameter from about 1.48" to about 1.62"; and,
a polyurethane cover formed from:

(a) (1) a diisocyanate selected from the group consisting of toluene diisocyanate, 4,4'-diphenylmethane diisocyanate, Isophorone diisocyanate and mixtures thereof and

(2) a polyol; and,

(b) a curing agent comprising:

(1) dimethylthio-2,4-toluenediamine; and,

(2) diethyl-2,4-toluenediamine.

41. The golf ball of claim 40 wherein the polyol is an ether glycol.